

2. Two-component water paint system according to claim 1, [characterized in that] wherein the hydroxy-functional alkyd resin has a hydroxyl content of 1 to 8 wt.-%.
3. Two-component water paint system according to claim 1 or 2, [characterized in that] wherein the hydroxy-functional alkyd resin is additionally modified [due to a] by reaction with isocyanate.
4. Process for the [production] preparation of a two-component water paint system according to [any of claims 1 to 3] claim 1, comprising the steps of:
  - 1) providing an isocyanate as the first component,
  - 2) preparing an aqueous emulsion of a hydroxy-functional alkyd resin comprising:
    - a) reacting an oleic or fatty acid component, a polyvalent alcohol, a polyether polyol having a molecular weight of 400 to 8,000, a monobasic carboxylic acid and a [dicarboxylic] polycarboxylic acid or the anhydride thereof to obtain a hydroxy-functional alkyd resin,
    - b) neutralizing the hydroxy-functional alkyd resin with ammonia or amine,
    - c) emulsifying the hydroxy-functional alkyd resin in water to provide the second component.
5. Process according to claim 4, [characterized in that] wherein the hydroxy-functional alkyd resin has a hydroxyl content of 1 to 8 wt.-%.
6. Process according to claim 4, wherein the alkyd resin is additionally reacted with isocyanate.
7. Process for painting a substrate using a paint system prepared according to claim 4, comprising the steps of mixing the first and second components shortly before painting and applying the resulting mixture to the substrate.
8. Process according to claim 7, wherein the paint is applied in a film having a thickness of at least 120  $\mu\text{m}$ .
9. A painted article comprising a substrate coated with an essentially bubble-free film comprising a cured paint system according to claim 1.

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336, 423.1 ±

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